

Claims

1. A method of finding a face in a binarized image by comparing the dot group of the binarized image with the dot group of a face model, wherein the dot groups of the binarized image and of the face model are compared on the basis of the Hausdorff spacing between the dots of the dot groups, and a face in the binarized image is recognized when a measure derived from the Hausdorff spacing fails to reach a limit value.
2. The method as claimed in claim 1, wherein the binarized image is derived from the original image by means of edge extraction.
3. The method as claimed in claim 1 or 2, wherein the binarized image first is compared on a small scale with a face model of corresponding small size, the area of the binarized image in which a face was found is enlarged and compared once again with a face model of corresponding larger size, the enlarging and comparing of the binarized image area and face model are repeated, as the case may be, until the face in the binarized image was localized with sufficient accuracy.
4. The method as claimed in claim 3, wherein different face models with different resolutions are used depending on the size of the binarized image.
5. The method as claimed in claim 3 or 4, wherein the edge extraction for deriving the binarized image from the original image is carried out with different resolutions depending on the size of the binarized image.
6. The method as claimed in any one of claims 3 to 5, wherein different steps of rotation are used depending on the size of the binarized image.
7. The method as claimed in any one of the preceding claims, wherein the Hausdorff measure is determined on the basis of the average value of the smallest $x\%$ of all minimum Hausdorff spacings, with $0 < x < 100$.

8. A system for implementing the method as claimed in any one of the preceding claims, comprising a computing device for calculating the Hausdorff spacing and the Hausdorff measure on the basis of the dots of the binarized image and the face model.

11/11/2019 10:11:11 AM